**Supplementary Table 5. Fungus in the tissue samples showing differential abundance between the GC and control group at the species level by Welch’s t test**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **cancer** | **control** | **diff** | **conf\_min** | **conf\_max** | **p-value** | **q-value** |
| Candida\_albicans | 31.00224 | 4.365933 | 26.63631 | 15.49378 | 37.77884 | 1.50E-05 | 0.003053 |
| Aspergillus\_montevidensis | 0.375822 | 2.819969 | -2.444147 | -3.895849 | -0.992445 | 0.001437 | 0.146536 |
| Saitozyma\_podzolica | 0.081256 | 0.960929 | -0.879673 | -1.429693 | -0.329653 | 0.002324 | 0.158057 |
| Arcopilus\_cupreus | 0 | 0.978202 | -0.978202 | -1.635864 | -0.320541 | 0.004461 | 0.227524 |
| Aspergillus\_sydowii | 0.032807 | 1.076218 | -1.043411 | -1.765042 | -0.32178 | 0.005579 | 0.227611 |
| Penicillium\_arenicola | 0.102258 | 1.081398 | -0.97914 | -1.681585 | -0.276695 | 0.00722 | 0.245493 |
| Fusicolla\_acetilerea | 0.625127 | 0.082896 | 0.542231 | 0.101547 | 0.982916 | 0.01691 | 0.375449 |
| Slooffia\_tsugae | 0 | 0.260064 | -0.260064 | -0.471368 | -0.048761 | 0.017019 | 0.375449 |
| Mortierella\_elongata | 0.005307 | 0.304602 | -0.299296 | -0.542558 | -0.056033 | 0.017054 | 0.375449 |
| Fusarium\_solani | 0.539087 | 0.050389 | 0.488698 | 0.086235 | 0.891161 | 0.018404 | 0.375449 |
| Wickerhamomyces\_anomalus | 4.67E-05 | 0.948851 | -0.948804 | -1.752198 | -0.145411 | 0.021704 | 0.377191 |
| Starmerella\_bacillaris | 0 | 2.554493 | -2.554493 | -4.725891 | -0.383095 | 0.022188 | 0.377191 |
| Metarhizium\_carneum | 0 | 0.284871 | -0.284871 | -0.553249 | -0.016493 | 0.038004 | 0.454641 |